

IN THE US PATENT & TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS & INTERFERENCES

APPLICANT: WEISSER ATT'Y DOCKET: 870-003-174
SERIAL #: 10/ 506,477 CONF. #: 3038
FILED: 1 SEP. 2004
EXAMINER: V. DWIVEDI ART UNIT: 3746

REPLY BRIEF 37 C.F.R. §41.41

Commissioner for Patents 25 AUG. 2008
PO BOX 1450
ALEXANDRIA VA 22313
Sir:

In response to the EXAMINER'S ANSWER mailed
25 JUNE 2008, Applicant chooses to MAINTAIN THIS APPEAL. No extension
of time is believed necessary. However, if any extension under Rule
136(b) **is** necessary, Applicant authorizes a charge for any associated
fee to Dep. Acct. 23-0442. There is good cause, namely the need for
time to obtain instructions from the inventor & assignee in Germany.

I REAL PARTY IN INTEREST

The real party in interest is EBM-PAPST ST. GEORGEN GmbH & Co.
KG, the assignee by virtue of an assignment recorded 29 SEP. 2004
at Reel 15 199, Frame 0070.

II RELATED APPEALS & INTERFERENCES

There are believed to be no related appeals or interferences.

III STATUS OF CLAIMS

Independent claim 1 and its dependent claims 2-19 are pending.
All claims are rejected. The claims retain their original
wording, published 9 JUN. 2005 in US 2005-123 423-A1.
All of claims 1-19 are the subject of this appeal.

The undersigned hereby certifies that this document is being submitted
via EFS-WEB on AUG. 25, 2008.

/Milton M. Oliver/

IV STATUS OF AMENDMENTS

A first amendment, to the specification, was filed 4 JUN. 2007 and has been entered. A further response and explanation dated 27 AUG. 2007 was submitted, but did not amend the claims. A Request for Panel Review was filed 5 DEC. 2007, but did not result in any modification of the Examiner's rejection.

V SUMMARY OF THE CLAIMED SUBJECT-MATTER

The subject-matter remains as stated in the Appeal Brief filed 27 MAY 2008.

VI GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-3 and 13-15 are rejected as anticipated by SAITO USP 5,979,541; see pages 3 & 7 of the Examiner's Answer. Dependent claims 4, 15 & 17 are rejected as anticipated by, or as obvious over SAITO; see page 4, bottom, of the Examiner's Answer. Dependent claims 5-12, 16, 18, and 19 are rejected as obvious over a combination of SAITO, YOKOZAWA and BLUMENBERG; see page 5 of the Examiner's Answer. As a **new ground** of rejection, claim 5 is rejected as obvious over SAITO USP 5,979,541 in view of newly-cited YAMAMURA USP RE-33652, showing a welding bead; see page 6 of the Examiner's Answer.

VII ARGUMENT

The present invention is directed to a motor whose internal stator is surrounded by a substantially fluid-tight enclosure which minimizes infiltration of water which could cause short-circuiting. In response to the Examiner's proposal to delete the word "substantially," Applicant has painstakingly explained that the Examiner's proposal is not appropriate, since the enclosure in question is penetrated by a shaft of the motor, and those skilled in the art know that seals at interfaces between rotating elements and stationary elements of a motor are never perfect, as a practical matter. It would mislead, to suggest that the enclosure is *completely* fluid-tight. Yet the examiner has been insistent that the claims do not distinguish over the cited art if the word "substantially" remains; see Final Rejection, page 6, middle paragraph.

Despite the facts that SAITO has **no teaching** of water-resistance

and, understandably, has **no structure** which would provide such a feature, the Examiner stubbornly, and incorrectly, contends that the SAITO yoke 62 (described at SAITO col. 5, lines 35-65) is, to quote the phrase bridging pages 3-4 of the Examiner's Answer, "a pot-shaped part 62 having one end connected to said base 31, forming a substantially fluid-tight annular space enclosing said internal stator."

Yoke 62 is neither pot-shaped, nor even circumferentially continuous. Col. 5, lines 36-37, state that it "is composed of a first yoke 621 and a second yoke 624." Lines 37-39 further state that "first yoke 621 has . . . four first claw parts 623 . . . arranged at equal intervals" and lines 40-43 state that "second yoke 624 has four second claw parts . . . arranged at equal intervals." SAITO FIG. 6 clearly illustrates this inconvenient fact, and the continuous air gap (resembling the smile of a jack-o-lantern) between first yoke 621 and second yoke 624, both of which the Examiner apparently disregards. The assignee of the present application is a longtime manufacturer of thousands of clawpole motors, such as that shown in JESKE USP 5,831,359, and thus finds the Examiner's misinterpretations astonishing. The Examiner's interpretation of "fluid-tight" is apparently binary: any structure which is not completely fluid-tight has been interpreted as "substantially fluid-tight" even if 20-30% of the periphery is completely **open** to water penetration; see page 7 of the Examiner's Answer. This erroneous interpretation tortures the claim language, and is logically untenable.

SAITO col. 5, lines 25-26, state "the stator 6 of the fan motor has a holder 61 and a yoke 62 supported by the holder 61." Yoke 62 is clearly PART OF the stator, along with coil 63. Yet the Examiner contends that part 62 ENCLOSES the internal stator; see Examiner's Answer, page 4, line 1. How can an element enclose itself? This position is logically untenable.

The section 102 rejection set forth on pages 3-4 of the Examiner's Answer is factually incorrect, and must be reversed.

Dependent claims 4, 15 and 17 were rejected as anticipated by, or as obvious over, SAITO, on the theory that the features recited therein (claim 4: ultrasonic welding; claim 15: adhesion; claim 17: welding) were merely product-by-process limitations entitled to no patentable weight, and that the structure recited in parent claim 1

was already shown in SAITO, so how the structure was created is irrelevant. The argument above has demonstrated that the premise of equivalent structure is completely incorrect, so the rest of the attempted syllogism falls with it. Further, Applicant respectfully submits that persons of ordinary skill in the motor manufacturing art can distinguish, by inspection of a finished product, whether a peripheral joint was made by welding, by adhesion, or by another process, so the features of these claims are shorthand descriptions of the resulting structure, and not mere "product-by-process limitations" as contended by the Examiner. The section 103 rejection of dependent claims 4, 15 and 17 should therefore be reversed.

Page 5 of the Examiner's Answer rejects dependent claims 6-12, 16, 18 and 19 as obvious over a combination of SAITO, YOKOZAWA, and BLUMENBERG, essentially **repeating verbatim** pages 4-5 of the Final Rejection of SEP. 5, 2007. Applicant has *already refuted* these contentions on pages 6-7 of the Brief on Appeal filed 27 May 2008, and the Board's attention is respectfully directed thereto. Reversal of the section 103 rejection of claims 6-12, 16, 18 & 19 is solicited.

Page 6 of the Examiner's Answer introduces a **new ground of rejection** of dependent claim 5, namely obviousness, based on a combination of SAITO USP 5,979,541 with YAMAMURA Re 33,652. The Examiner has tacitly conceded the point made in the Brief on Appeal, at the middle of page 6, namely that the welding bead shown in FIG. 3 is a structural feature, **not** a process limitation. Applicant is not egotistical enough to assert that he invented the welding bead, **per se**, which doubtless was first employed in prehistoric times, probably in the Bronze Age. Applicant agrees that YAMAMURA has a welding bead, but sees no other relevance to present invention. Applicant vigorously disputes the Examiner's contention that addition of a welding bead to the SAITO structure would result in the *entire combination* of features incorporated into dependent claim 5, including the many features of parent claim 1 which are wholly absent from SAITO.

In YAMAMURA, the electric motor 3 of a compressor is located directly in the fluid to be pumped, namely a cooling gas such as FREON, which is supplied via a pipe 17. Electric motor 3 is arranged in a lower part 1 of a closed housing in which there is suction pressure. At the upper end of lower housing 1 is a compressor 2 which

is driven by motor 3, and which transports the coolant from lower housing 1 through an opening 20 into upper housing portion 21, where a higher pressure prevails. Therefore, upper housing 1 must be sealed with respect to lower housing 1.

According to a prior art structure shown in FIG. 1 of YAMAMURA, sealing between the separate chambers was problematic because part 112 in FIG. 1 is made of cast iron, and is hard to weld to housing 101, as detailed at col. 2, lines 11-19 of YAMAMURA.

Therefore, YAMAMURA employs a ring 14 of soft steel (col. 4, line 17) which is readily weldable, and which is secured using screws 24 onto the stationary part 8 of the compressor. The ring 14 of soft steel is connected using a thin welding bead (col. 6, lines 55-63) to the lower housing part 1 and to the upper housing part 16, and thus the high-pressure chamber 21 is successfully separated from the low-pressure chamber below.

Even if there were motivation to attempt combination of SAITO with YAMAMURA, the resulting combined structure would not have any pot-shaped structure surrounding the internal stator and providing a substantially fluid-tight separation, extending through the air gap. YAMAMURA has an air gap, but nothing extends through it. SAITO similarly has an air gap (within the ring magnets 24 in FIG. 4) but also has no separating structure extending through its gap. It will be apparent that the section 103 rejection of dependent claim 5, based upon SAITO with YAMAMURA, is clearly erroneous and must be reversed.

VIII CLAIMS APPENDIX

The claims are set forth on pages 8, 9 and 11 of the Brief on Appeal.

IX EVIDENCE APPENDIX

No additional evidence is submitted, in view of the Rule 41.39(b)(2) provision that any such evidence would reopen prosecution.

X RELATED PROCEEDINGS APPENDIX

Applicant is not aware of any related proceedings.

Applicant respectfully urges the Board to reverse the Final Rejection of claims 1-19, and to pass the application to allowance.

Respectfully submitted,
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